

IN THE ABSTRACT

Please add the Abstract of the Disclosure, as set forth on the separate accompanying sheet. That Abstract of the Disclosure is essentially the same, in content as the Abstract which is a part of the published PCT application WO 2004/017252 A1. No new matter is being added by the presentation of this Abstract of the Disclosure.

ABSTRACT OF THE DISCLOSURE

Signals generated by an electronic image sensor, during pattern recognition of image contents in a test piece, are evaluated. The image sensor receives an input light signal and emits an electrical output signal that correlates with the input light signal. The image content of a window, having a size of $n \times n$ pixels, is analyzed. The output signals that are either directly or indirectly emitted by the image sensor are transformed into at least one translationally invariant characteristic value by the use of at least one calculation specification. This characteristic value is weighted by at least one fuzzy matching function which correlates with the value range of the characteristic value. A higher-order fuzzy matching function is generated by linking all of the matching functions by use of a calculation specification including at least one rule. A sympathy value is determined from the higher-order fuzzy matching function. That sympathy value is compared with a threshold value. A decision is then made from this comparison regarding association with a class.